



General

Guideline Title

Screening for depression in children and adolescents: U.S. Preventive Services Task Force recommendation statement.

Bibliographic Source(s)

U.S. Preventive Services Task Force. Screening for depression in children and adolescents: U.S. Preventive Services Task Force Recommendation Statement. Ann Intern Med. 2016 Mar 1;164(5):360-6. [20 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: U.S. Preventive Services Task Force. Screening and treatment for major depressive disorder in children and adolescents. Pediatrics 2009;123:1223-1228. [6 references]

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations (A, B, C, D, or I) and identifies the Levels of Certainty regarding Net Benefit (High, Moderate, and Low). The definitions of these grades can be found at the end of the "Major Recommendations" field.

Summary of Recommendations and Evidence

The USPSTF recommends screening for major depressive disorder (MDD) in adolescents aged 12 to 18 years. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up. (B recommendation)

The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for MDD in children aged 11 years or younger. (I statement)

Clinical Considerations

Patient Population under Consideration

This recommendation applies to children and adolescents aged 18 years or younger who do not have a diagnosis of MDD. This recommendation focuses on screening for MDD and does not address screening for other depressive disorders, such as minor depression or dysthymia.

Assessment of Risk

The USPSTF recommends screening for MDD in all adolescents but notes that several risk factors might help identify patients who are at higher risk. The causes of MDD are not fully known and likely involve a combination of genetic, biological, and environmental factors. Risk factors for MDD in children and adolescents include female sex; older age; family (especially maternal) history of depression; prior episode of depression; other mental health or behavioral problems; chronic medical illness; overweight and obesity; and, in some studies, Hispanic race/ethnicity. Other psychosocial risk factors include childhood abuse or neglect, exposure to traumatic events (including natural disasters), loss of a loved one or romantic relationship, family conflict, uncertainty about sexual orientation, low socioeconomic status, and poor academic performance.

Screening Tests

Many MDD screening instruments have been developed for use in primary care and have been used in adolescents. Two that have been most often studied are the Patient Health Questionnaire for Adolescents (PHQ-A) and the primary care version of the Beck Depression Inventory (BDI). Data on the accuracy of MDD screening instruments in younger children are limited.

Screening Intervals

The USPSTF found no evidence on appropriate or recommended screening intervals, and the optimal interval is unknown. Repeated screening may be most productive in adolescents with risk factors for MDD. Opportunistic screening may be appropriate for adolescents, who may have infrequent health care visits.

Treatment or Interventions

Treatment options for MDD in children and adolescents include pharmacotherapy, psychotherapy, collaborative care, psychosocial support interventions, and complementary and alternative medicine approaches. Fluoxetine is approved by the U.S. Food and Drug Administration (FDA) for treatment of MDD in children aged 8 years or older, and escitalopram is approved for treatment of MDD in adolescents aged 12 to 17 years. The FDA has issued a boxed warning for antidepressants, recommending that patients of all ages who start antidepressant therapy be monitored appropriately and observed closely for clinical worsening, suicidality, or unusual changes in behavior. Collaborative care is a multicomponent, health care system-level intervention that uses care managers to link primary care providers, patients, and mental health specialists.

Suggestions for Practice Regarding the I Statement

In deciding whether to screen for MDD in children aged 11 years or younger, primary care providers should consider the following issues.

Potential Preventable Burden

Little is known about the prevalence of MDD in children aged 11 years or younger. The mean age of onset of MDD is about 14 to 15 years. Early onset is associated with worse outcomes. The average duration of a depressive episode in childhood varies widely, from 2 to 17 months.

Potential Harms

The USPSTF found inadequate evidence on the harms of screening for MDD in children. The USPSTF concluded that screening itself is unlikely to be associated with significant harms, aside from opportunity costs, labeling and potential stigma associated with a positive result, and referral for further evaluation and treatment.

The USPSTF concluded, on the basis of a previous review, that the use of SSRIs in children is associated

with harms, specifically risk for suicidality. Evidence on the harms of psychotherapy alone or in combination with SSRIs in children is limited. Newer studies provide little additional evidence on treatment harms in children and adolescents but do not suggest more risks. Only 4 studies examined the harms of treatment with SSRIs in children and adolescents. These studies found no increased risk for suicidality associated with antidepressant use, but risk for rare events could not be precisely determined because the studies had limited statistical power. No trials of psychotherapy or combined interventions in children examined harms.

Current Practice

The USPSTF found no evidence on the current frequency of or methods used in primary care for screening for MDD in children.

Additional Approaches to Prevention

The Community Preventive Services Task Force recommends collaborative care for the management of depressive disorders, based on strong evidence of effectiveness in improving depression symptoms, adherence and response to treatment, and remission and recovery from depression. For this and related recommendations from the Community Preventive Services Task Force, go to www.thecommunityguide.org/mentalhealth/index.html.

Useful Resources

In a separate recommendation statement, the USPSTF concluded that the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in primary care settings, including among adolescents (I statement) (see the National Guideline Clearinghouse [NGC] summary of the USPSTF guideline [Screening for suicide risk in adolescents, adults, and older adults in primary care: U.S. Preventive Services Task Force recommendation statement](#)). Other USPSTF recommendations on mental health topics pertaining to children and adolescents, including illicit drug and alcohol use, can be found on the USPSTF Web site (www.uspreventiveservicestaskforce.org).

Definitions

What the USPSTF Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer/provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer/provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer/provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality or conflicting, and the balance of benefits and harms cannot be determined.	Read the "Clinical Considerations" section of the USPSTF Recommendation Statement (see the "Major Recommendations" field). If offered, patients should understand the uncertainty about the balance of benefits and harms.

USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines certainty as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	<p>The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as:</p> <ul style="list-style-type: none">The number, size, or quality of individual studiesInconsistency of findings across individual studiesLimited generalizability of findings to routine primary care practiceLack of coherence in the chain of evidence <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none">The limited number or size of studiesImportant flaws in study design or methodsInconsistency of findings across individual studiesGaps in the chain of evidenceFindings not generalizable to routine primary care practiceA lack of information on important health outcomes <p>More information may allow an estimation of effects on health outcomes.</p>

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Major depressive disorder (MDD)

Note: This guideline focuses only on screening for MDD, and does not address screening for various less severe depressive disorders.

Guideline Category

Prevention

Screening

Clinical Specialty

Family Practice

Pediatrics

Preventive Medicine

Psychiatry

Psychology

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Health Care Providers

Nurses

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Guideline Objective(s)

To update the 2009 U.S. Preventive Services Task Force (USPSTF) recommendation on screening for major depressive disorder (MDD) in children and adolescents

Target Population

Children and adolescents aged 18 years or younger who do not have a diagnosis of major depressive disorder (MDD)

Interventions and Practices Considered

Screening for major depressive disorder (MDD) in children aged 11 years and younger and in adolescents aged 12 to 18 years

Major Outcomes Considered

- Key Question 1: Does screening for major depressive disorder (MDD) among children and adolescents in the primary care (or comparable) setting lead to improved health and other related outcomes overall and among subgroups defined by age, sex, or race/ethnicity?
- Key Question 2: Are depression screening instruments for children and adolescents accurate in identifying MDD in primary care settings overall and among subgroups defined by age, sex, race or race/ethnicity?
- Key Question 3: Does screening increase the proportion of children and adolescents identified with MDD overall and among subgroups defined by age, sex, race/ethnicity?
- Key Question 4: What are the harms of screening children and adolescents for MDD overall and among subgroups defined by age, sex, race/ethnicity?
- Key Question 5: Does treatment of MDD among children and adolescents identified in primary care improve health and other related outcomes overall and among subgroups defined by age, sex, race/ethnicity?
- Key Question 6: What are the harms of MDD treatment for children and adolescents overall and

among subgroups defined by age, sex, race/ethnicity?

Methodology

Methods Used to Collect>Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Searches of Unpublished Data

Description of Methods Used to Collect>Select the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic review and full evidence report were prepared by the RTI International–University of North Carolina Evidence-based Practice Center (EPC) for the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

Data Sources and Searches

The investigators searched PubMed (MEDLINE), the Cochrane Library, and PsycINFO for English-language articles published from May 2007 to 4 February 2015. Unpublished literature was identified via searches of ClinicalTrials.gov, Health Services Research Projects in Progress, and the World Health Organization's International Clinical Trials Registry Platform. They also reviewed and included, as appropriate, studies from reference lists of pertinent review articles and all literature suggested by peer reviewers or public comment respondents. Appendix Table 1 in the systematic review and the full evidence report include all of the search strategies used for each key question and the databases searched.

Two investigators independently reviewed titles and abstracts. The investigators dually and independently reviewed the full text of studies that at least 1 reviewer indicated as potentially meeting the prespecified criteria for each key question, according to initial abstract review. To reduce heterogeneity and ensure focus on children and adolescents with more serious symptoms because they are more likely to have severe functional impairment and suicidality, they restricted inclusion of efficacy and harms studies to those in which at least 50% of participants had a major depressive disorder (MDD) diagnosis. Screening accuracy studies had to be done in primary care or similar settings, be of feasible length and format to administer in a setting similar to primary care, and include a comparison against a gold-standard assessment tool. The investigators included randomized and nonrandomized trials published between May 2007 and 4 February 2015 and systematic reviews published between January 2011 and 4 February 2015 of MDD treatment efficacy and harms, test-retest studies of screening for MDD, and cohort studies with at least 1000 participants for studies of screening and treatment harms.

In addition to the new literature searches, the investigators also applied, dually and independently, the inclusion and exclusion criteria described previously to all studies from the 2009 review, which included articles published from 1990 to May 2007 that focused on screening for and treatment of depression, but not specifically MDD, in children and adolescents. The exact differences between the inclusion and exclusion criteria applied in the current and former reviews are documented in the full evidence report.

Results

Only 2 new treatment efficacy studies met the criteria. The studies included in the 2009 review, when re-reviewed against the criteria, yielded 5 studies on screening accuracy and 4 trials in 6 publications on treatment efficacy (3 publications on 1 trial and 1 publication each on the other 3 trials).

Number of Source Documents

Two fair- or good-quality studies were included in the quantitative synthesis. See the flow diagram (Appendix Figure 2) in the systematic review (see the "Availability of Companion Documents" field) for a summary of evidence search and selection.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Using predefined criteria developed by the U.S. Preventive Services Task Force (USPSTF) and others for additional criteria for diagnostic accuracy studies, two investigators independently assessed the quality of each study as good, fair, or poor. See the "Description of the Methods Used to Analyze the Evidence" field for further information.

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic review and full evidence report were prepared by the RTI International–University of North Carolina Evidence-based Practice Center (EPC) for the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

Data Extraction and Quality Assessment

The investigators resolved disagreements about quality of studies by discussion and consensus. For screening accuracy studies, flaws that resulted in poor-quality ratings included use of an inappropriate reference standard, improper administration of the screening test, biased ascertainment of the reference standard, very small sample size, or very narrowly selected spectrum of patients. For treatment efficacy and harms studies, flaws that resulted in poor quality ratings included high overall attrition (at least 20%) or differential attrition (at least 15%) between study groups, unreliable or invalid measurement instruments or unequal application across study groups (including not masking outcome assessment), and little or no attention given to key confounders; and, for randomized controlled trials (RCTs), the lack of an intention-to-treat analysis. The investigators excluded all studies dually determined to be of poor quality. They rated the overall body of evidence for each key question using the system developed by the USPSTF.

Data Synthesis and Analysis

The investigators organized the findings according to the key questions. They used Comprehensive Meta Analysis, version 3 (Biostat), to calculate effect sizes and 95% confidence intervals (CIs). The investigators planned to use meta-analysis to pool the efficacy outcomes by drug (such as escitalopram trials) and drug family (such as all selective serotonin reuptake inhibitors [SSRIs]), but heterogeneity across studies limited the number of combinable interventions and outcomes, which precluded the calculation of pooled estimates.

Methods Used to Formulate the Recommendations

Description of Methods Used to Formulate the Recommendations

The U.S. Preventive Services Task Force (USPSTF) systematically reviews the evidence concerning both the benefits and harms of widespread implementation of a preventive service. It then assesses the certainty of the evidence and the magnitude of the benefits and harms. On the basis of this assessment, the USPSTF assigns a letter grade to each preventive service signifying its recommendation about provision of the service (see Table below). An important, but often challenging, step is determining the balance between benefits and harms to estimate "net benefit" (that is, benefits minus harms).

U.S. Preventive Services Task Force Recommendation Grid*

Certainty of Net Benefit	Magnitude of Net Benefit			
	Substantial	Moderate	Small	Zero/Negative
High	A	B	C	D
Moderate	B	B	C	D
Low	Insufficient			

*A, B, C, D, and I (Insufficient) represent the letter grades of recommendation or statement of insufficient evidence assigned by the USPSTF after assessing certainty and magnitude of net benefit of the service (see the "Rating Scheme for the Strength of the Recommendations" field).

The overarching question that the USPSTF seeks to answer for every preventive service is whether evidence suggests that provision of the service would improve health outcomes if implemented in a general primary care population. For screening topics, this standard could be met by a large randomized controlled trial (RCT) in a representative asymptomatic population with follow-up of all members of both the group "invited for screening" and the group "not invited for screening."

Direct RCT evidence about screening is often unavailable, so the USPSTF considers indirect evidence. To guide its selection of indirect evidence, the Task Force constructs a "chain of evidence" within an analytic framework. For each key question, the body of pertinent literature is critically appraised, focusing on the following 6 questions:

- Do the studies have the appropriate research design to answer the key question(s)?
- To what extent are the existing studies of high quality? (i.e., what is the internal validity?)
- To what extent are the results of the studies generalizable to the general U.S. primary care population and situation? (i.e., what is the external validity?)
- How many studies have been conducted that address the key question(s)? How large are the studies? (i.e., what is the precision of the evidence?)
- How consistent are the results of the studies?
- Are there additional factors that assist the USPSTF in drawing conclusions (e.g., presence or absence of dose-response effects, fit within a biologic model)?

The next step in the USPSTF process is to use the evidence from the key questions to assess whether there would be net benefit if the service were implemented. In 2001, the USPSTF published an article that documented its systematic processes of evidence evaluation and recommendation development. At that time, the USPSTF's overall assessment of evidence was described as good, fair, or poor. The USPSTF realized that this rating seemed to apply only to how well studies were conducted and did not fully capture all of the issues that go into an overall assessment of the evidence about net benefit. To avoid confusion, the USPSTF has changed its terminology. Whereas individual study quality will continue to be characterized as good, fair, or poor, the term *certainty* will now be used to describe the USPSTF's assessment of the overall body of evidence about net benefit of a preventive service and the likelihood

that the assessment is correct. Certainty will be determined by considering all 6 questions listed above; the judgment about certainty will be described as high, moderate, or low.

In making its assessment of certainty about net benefit, the evaluation of the evidence from each key question plays a primary role. It is important to note that the USPSTF makes recommendations for real-world medical practice in the United States and must determine to what extent the evidence for each key question—even evidence from screening RCTs or treatment RCTs—can be applied to the general primary care population. Frequently, studies are conducted in highly selected populations under special conditions. The USPSTF must consider differences between the general primary care population and the populations studied in RCTs and make judgments about the likelihood of observing the same effect in actual practice.

It is also important to note that one of the key questions in the analytic framework refers to the potential harms of the preventive service. The USPSTF considers the evidence about the benefits and harms of preventive services separately and equally. Data about harms are often obtained from observational studies because harms observed in RCTs may not be representative of those found in usual practice and because some harms are not completely measured and reported in RCTs.

Putting the body of evidence for all key questions together as a chain, the USPSTF assesses the certainty of net benefit of a preventive service by asking the 6 major questions listed above. The USPSTF would rate a body of convincing evidence about the benefits of a service that, for example, derives from several RCTs of screening in which the estimate of benefits can be generalized to the general primary care population as "high" certainty (see the "Rating Scheme for the Strength of Recommendations" field). The USPSTF would rate a body of evidence that was not clearly applicable to general practice or has other defects in quality, research design, or consistency of studies as "moderate" certainty. Certainty is "low" when, for example, there are gaps in the evidence linking parts of the analytic framework, when evidence to determine the harms of treatment is unavailable, or when evidence about the benefits of treatment is insufficient. Table 4 in the methodology document listed below (see the "Availability of Companion Documents" field) summarizes the current terminology used by the USPSTF to describe the critical assessment of evidence at all 3 levels: individual studies, key questions, and overall certainty of net benefit of the preventive service.

Sawaya GF, Guirguis-Blake J, LeFevre M, Harris R, Petitti D; U.S. Preventive Services Task Force. Update on the methods of the U.S. Preventive Services Task Force: estimating certainty and magnitude of net benefit. Ann Intern Med. 2007;147:871-875. [5 references].

I Statements

For I statements, the USPSTF has a plan to commission its Evidence-based Practice Centers (EPCs) to collect information in 4 domains pertinent to clinical decisions about prevention and to report this information routinely. This plan is described in the paper: Petitti DB et al. Update on the methods of the U.S. Preventive Services Task Force: insufficient evidence. Ann Intern Med. 2009;150:199-205. www.annals.org.

The first domain is potential preventable burden of suffering from the condition. When evidence is insufficient, provision of an intervention designed to prevent a serious condition (such as dementia) might be viewed more favorably than provision of a service designed to prevent a condition that does not cause as much suffering (such as rash). The USPSTF recognized that "burden of suffering" is subjective and involves judgment. In clinical settings, it should be informed by patient values and concerns.

The second domain is potential harm of the intervention. When evidence is insufficient, an intervention with a large potential for harm (such as major surgery) might be viewed less favorably than an intervention with a small potential for harm (such as advice to watch less television). The USPSTF again acknowledges the subjective nature and the difficulty of assessing potential harms: for example, how bad is a "mild" stroke?

The third domain is cost—not just monetary cost, but opportunity cost, in particular the amount of time a provider spends to provide the service, the amount of time the patient spends to partake of it, and the

benefits that might derive from alternative uses of the time or money for patients, clinicians, or systems. Consideration of clinician time is especially important for preventive services with only insufficient evidence because providing them could "crowd out" provision of preventive services with proven value, services for conditions that require immediate action, or services more desired by the patient. For example, a decision to routinely inspect the skin could take up the time available to discuss smoking cessation, or to address an acute problem or a minor injury that the patient considers important.

The fourth domain is current practice. This domain was chosen because it is important to clinicians for at least 2 reasons. Clinicians justifiably fear that not doing something that is done on a widespread basis in the community may lead to litigation. More important, addressing patient expectations is a crucial part of the clinician-patient relationship in terms of building trust and developing a collaborative therapeutic relationship. The consequences of not providing a service that is neither widely available nor widely used are less serious than not providing a service accepted by the medical profession and thus expected by patients. Furthermore, ingrained care practices are difficult to change, and efforts should preferentially be directed to changing those practices for which the evidence to support change is compelling.

Although the reviewers did not explicitly recognize it when these domains were chosen, the domains all involve consideration of the potential consequences—for patients, clinicians, and systems—of providing or not providing a service. Others writing about medical decision making in the face of uncertainty have suggested that the consequences of action or inaction should play a prominent role in decisions.

Rating Scheme for the Strength of the Recommendations

What the U.S. Preventive Services Task Force (USPSTF) Grades Mean and Suggestions for Practice

Grade	Grade Definitions	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer/provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer/provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer/provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality or conflicting, and the balance of benefits and harms cannot be determined.	Read the "Clinical Considerations" section of the USPSTF Recommendation Statement (see the "Major Recommendations" field). If offered, patients should understand the uncertainty about the balance of benefits and harms.

USPSTF Levels of Certainty Regarding Net Benefit

Definition: The USPSTF defines certainty as "likelihood that the USPSTF assessment of the net benefit of a preventive service is correct." The net benefit is defined as benefit minus harm of the preventive service as implemented in a general, primary care population. The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service.

Level of Certainty	Description
High	The available evidence usually includes consistent results from well-designed, well-conducted studies in representative primary care populations. These studies assess the effects of the preventive service on health outcomes. This conclusion is therefore unlikely to be strongly affected by the results of future studies.
Moderate	<p>The available evidence is sufficient to determine the effects of the preventive service on health outcomes, but confidence in the estimate is constrained by factors such as:</p> <ul style="list-style-type: none"> The number, size, or quality of individual studies Inconsistency of findings across individual studies Limited generalizability of findings to routine primary care practice Lack of coherence in the chain of evidence <p>As more information becomes available, the magnitude or direction of the observed effect could change, and this change may be large enough to alter the conclusion.</p>
Low	<p>The available evidence is insufficient to assess effects on health outcomes. Evidence is insufficient because of:</p> <ul style="list-style-type: none"> The limited number or size of studies Important flaws in study design or methods Inconsistency of findings across individual studies Gaps in the chain of evidence Findings not generalizable to routine primary care practice A lack of information on important health outcomes <p>More information may allow an estimation of effects on health outcomes.</p>

Cost Analysis

The U.S. Preventive Services Task Force (USPSTF) does not consider the costs of providing a service in this assessment.

Method of Guideline Validation

Comparison with Guidelines from Other Groups

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

Peer Review

Before the U.S. Preventive Services Task Force (USPSTF) makes its final determinations about recommendations on a given preventive service, the Evidence-based Practice Center (EPC) and the Agency for Healthcare Research and Quality (AHRQ) send the draft evidence review to 4 to 6 external experts and to Federal agencies and professional and disease-based health organizations with interests in the topic. The experts are asked to examine the review critically for accuracy and completeness and to respond to a series of specific questions about the document. The draft evidence review is also posted on the USPSTF Web site for public comment. After assembling these external review comments and documenting the proposed response to key comments, the topic team presents this information to the USPSTF in memo form. In this way, the USPSTF can consider these external comments before it votes on its recommendations about the service. Draft recommendation statements are then circulated for comment among reviewers representing professional societies, voluntary organizations, and Federal agencies, as well as posted on the USPSTF Web site for public comment. These comments are discussed before the final recommendations are confirmed.

Response to Public Comment

A draft version of this recommendation statement was posted for public comment on the USPSTF Web site from 8 September to 5 October 2015. Many comments focused on the phrase "adequate systems." Some commenters requested a more detailed definition of what constitutes an adequate system for screening, others recommended removing the conditional term "when," and others recommended that the requirement for adequate systems be stronger. To clarify the recommendation, the USPSTF separated it into 2 statements: one to support screening, and a second to explain how screening should be implemented. The USPSTF also revised the section on implementation to clarify that a range of staff types, organizational arrangements, and settings can support the goals of depression screening.

Comparison with Guidelines from Other Groups

Recommendations for screening from the following groups were discussed: the American Academy of Pediatrics Bright Futures program, Medicaid's Early and Periodic Screening, Diagnosis, and Treatment program, and the Canadian Task Force on Preventive Health Care.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Benefits of Early Detection and Intervention and Treatment

The U.S. Preventive Services Task Force (USPSTF) found no studies that directly evaluated whether screening for major depressive disorder (MDD) in adolescents in primary care (or comparable) settings leads to improved health and other outcomes. However, the USPSTF found adequate evidence that treatment of MDD detected through screening in adolescents is associated with moderate benefit (for example, improved depression severity, depression symptoms, or global functioning scores).

The USPSTF found no studies that directly evaluated whether screening for MDD in children aged 11 years or younger in primary care (or comparable) settings leads to improved health and other outcomes and found inadequate evidence on the benefits of treatment in children with screen-detected MDD.

Potential Harms

Harms of Early Detection and Intervention and Treatment

The U.S. Preventive Services Task Force (USPSTF) found no direct evidence on the harms of screening for major depressive disorder (MDD) in adolescents. Medications for the treatment of depression, such as selective serotonin reuptake inhibitors (SSRIs), have known harms. However, the magnitude of the harms of pharmacotherapy is small if patients are closely monitored, as recommended by the U.S. Food and Drug Administration (FDA). The USPSTF found adequate evidence on the harms of psychotherapy and psychosocial support in adolescents and estimates that the magnitude of these harms is small to none.

The USPSTF found inadequate evidence on the harms of screening for or treatment of MDD in children

aged 11 years or younger.

Qualifying Statements

Qualifying Statements

- The U.S. Preventive Services Task Force (USPSTF) makes recommendations about the effectiveness of specific clinical preventive services for patients without obvious related signs or symptoms.
- It bases its recommendations on the evidence of both the benefits and harms of the service and an assessment of the balance. The USPSTF does not consider the costs of providing a service in this assessment.
- The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision making to the specific patient or situation. Similarly, the USPSTF notes that policy and coverage decisions involve considerations in addition to the evidence of clinical benefits and harms.
- Recommendations made by the USPSTF are independent of the U.S. government. They should not be construed as an official position of the Agency for Healthcare Research and Quality (AHRQ) or the U.S. Department of Health and Human Services.

Implementation of the Guideline

Description of Implementation Strategy

The experiences of the first and second U.S. Preventive Services Task Force (USPSTF), as well as that of other evidence-based guideline efforts, have highlighted the importance of identifying effective ways to implement clinical recommendations. Practice guidelines are relatively weak tools for changing clinical practice when used in isolation. To effect change, guidelines must be coupled with strategies to improve their acceptance and feasibility. Such strategies include enlisting the support of local opinion leaders, using reminder systems for clinicians and patients, adopting standing orders, and audit and feedback of information to clinicians about their compliance with recommended practice.

In the case of preventive services guidelines, implementation needs to go beyond traditional dissemination and promotion efforts to recognize the added patient and clinician barriers that affect preventive care. These include clinicians' ambivalence about whether preventive medicine is part of their job, the psychological and practical challenges that patients face in changing behaviors, lack of access to health care or of insurance coverage for preventive services for some patients, competing pressures within the context of shorter office visits, and the lack of organized systems in most practices to ensure the delivery of recommended preventive care.

Dissemination strategies have changed dramatically in this age of electronic information. While recognizing the continuing value of journals and other print formats for dissemination, the USPSTF will make all its products available through its [Web site](#) [REDACTED]. The combination of electronic access and extensive material in the public domain should make it easier for a broad audience of users to access USPSTF materials and adapt them for their local needs. Online access to USPSTF products also opens up new possibilities for the appearance of the annual, pocket-size *Guide to Clinical Preventive Services*.

To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site, typically requiring the redesign of systems of care. Such a systems approach to prevention has had notable success in established staff-model health maintenance organizations, by addressing organization of care, emphasizing a philosophy of prevention, and altering the training and incentives for clinicians. Staff-model plans also benefit from integrated information

systems that can track the use of needed services and generate automatic reminders aimed at patients and clinicians, some of the most consistently successful interventions. Information systems remain a major challenge for individual clinicians' offices, however, as well as for looser affiliations of practices in network-model managed care and independent practice associations, where data on patient visits, referrals, and test results are not always centralized.

Implementation Tools

Mobile Device Resources

Patient Resources

Pocket Guide/Reference Cards

Staff Training/Competency Material

For information about availability, see the *Availability of Companion Documents and Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

U.S. Preventive Services Task Force. Screening for depression in children and adolescents: U.S. Preventive Services Task Force Recommendation Statement. Ann Intern Med. 2016 Mar 1;164(5):360-6. [20 references] [PubMed](#)

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2016 Mar 1

Guideline Developer(s)

U.S. Preventive Services Task Force - Independent Expert Panel

Guideline Developer Comment

The U.S. Preventive Services Task Force (USPSTF) is a federally-appointed panel of independent experts. Conclusions of the USPSTF do not necessarily reflect policy of the U.S. Department of Health and Human Services (DHHS) or its agencies.

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The U.S. Preventive Services Task Force (USPSTF) is an independent, voluntary body. The U.S. Congress mandates that the Agency for Healthcare Research and Quality support the operations of the USPSTF.

Guideline Committee

U.S. Preventive Services Task Force (USPSTF)

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*Members of the Task Force at the time this recommendation was finalized. For a list of current Task Force members, go to <http://www.uspreventiveservicestaskforce.org/Page/Name/our-members>.

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The U.S. Preventive Services Task Force (USPSTF) has an explicit policy concerning conflict of interest. All members disclose at each meeting if they have a significant financial, professional/business, or intellectual conflict for each topic being discussed. USPSTF members with conflicts may be recused from discussing or voting on recommendations about the topic in question.

Disclosures

Authors have disclosed no conflicts of interest. Authors followed the policy regarding conflicts of interest described at <http://www.uspreventiveservicestaskforce.org/Page/Name/conflict-of-interest-disclosures>. Forms can be viewed at www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M15-2957

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: U.S. Preventive Services Task Force. Screening and treatment for major depressive disorder in children and adolescents. Pediatrics 2009;123:1223-1228. [6 references]

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the [Annals of Internal Medicine Web site](#) [REDACTED].

Availability of Companion Documents

The following are available:

Evidence Reviews:

Forman-Hoffman V, McClure E, McKeeman J, Wood CT, Middleton JC, Skinner AC, Perrin EM, Viswanathan M. Screening for major depressive disorder among children and adolescents: a systematic review for the U.S. Preventive Services Task Force. Full evidence report. Evidence Synthesis No. 116. AHRQ Publication No. 13-05192-EF-1. Rockville (MD): Agency for Healthcare Research and Quality; 2016 Feb. 199 p.

Forman-Hoffman V, McClure E, McKeeman J, Wood CT, Middleton JC, Skinner AC, Perrin EM, Viswanathan M. Screening for major depressive disorder in children and adolescents: a systematic review for the U.S. Preventive Services Task Force. Ann Intern Med. 2016 Mar 1;164(5):342-349.

Available from the [U.S. Preventive Services Web \(USPSTF\) site](#) [REDACTED].

Background Articles:

Barton M et al. How to read the new recommendation statement: methods update from the U.S. Preventive Services Task Force. Ann Intern Med. 2007;147:123-127.

Guirguis-Blake J et al. Current processes of the U.S. Preventive Services Task Force: refining evidence-based recommendation development. Ann Intern Med. 2007;147:117-122.

Sawaya GF et al. Update on the methods of the U.S. Preventive Services Task Force: estimating certainty and magnitude of net benefit. Ann Intern Med. 2007;147:871-875.

Petitti DB et al. Update on the methods of the U.S. Preventive Services Task Force: insufficient evidence. Ann Intern Med. 2009;150:199-205.

Available from [USPSTF Web site](#) [REDACTED].

The following are also available:

Screening for depression in children and adolescents: clinical summary. Rockville (MD): U.S. Preventive Services Task Force; 2016 Feb. 1 p. Available from the [USPSTF Web site](#) [REDACTED].

A continuing medical education (CME) activity is available from the [Annals of Internal Medicine Web site](#) [REDACTED].

The [Electronic Preventive Services Selector \(ePSS\)](#) [REDACTED] is an application designed to provide primary care clinicians and health care teams timely decision support regarding appropriate screening, counseling, and preventive services for their patients. It is based on the current, evidence-

based recommendations of the USPSTF and can be searched by specific patient characteristics, such as age, sex, and selected behavioral risk factors.

Patient Resources

The following are available:

Screening for depression in children and adolescents: U.S. Preventive Services Task Force recommendation statement. Summaries for patients. Ann Intern Med. 2016 Mar 1;164(5):I-28.

Available from the [Annals of Internal Medicine Web site](#).

Screening for depression in children and adolescents. Understanding task force recommendations. Rockville (MD): U.S. Preventive Services Task Force; 2016 Feb. 4 p. Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#).

Myhealthfinder is a tool that provides personalized recommendations for clinical preventive services specific to the user's age, gender, and pregnancy status. It features evidence-based recommendations from the USPSTF and is available at www.healthfinder.gov.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

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